

51596 McKenzie Highway
PO Box 292 (for mail)
Blue River, OR 97413

(Summarizing our water quality data from 2022)

Blue River Water District strives to provide top quality water to every tap and we are pleased to present you with our annual report. Our goal is to inform and educate you about your water and your utility so we can work together to protect our drinking water sources.

Where does our water come from?

We have two wells (one is inactive and only used in emergencies) located near each other that draw from an underground aquifer and pump the water to two storage tanks located on hills at opposite ends of the system. The reservoirs both store water and maintain pressure in the piping system as water use fluctuates throughout the day. A *Source Water Assessment* that evaluates risks to our groundwater was completed by the Oregon Health Authority and Oregon Department of Environmental Quality in February 2001. As part of this study, we learned about the groundwater aquifer that supplies our well. A copy of this report is available upon request.

How is our water treated? Is our water safe?

Our water system has experienced some challenges, with the 2020 Holiday Farm Fire resulting in damage and isolation of some portions of the system. Your Superintendent and volunteer board members are working hard with regulators and consultant to utilize FEMA, insurance and grant funding to rebuild our water system even better than it was before. Through all of our challenges, we have some great water and a good system. *Our drinking water meets or exceeds all federal and state water quality standards.*

Groundwater stored below the earth receives some natural filtration as it flows through sands and gravels. Our source water is pure enough that we are not required to add chlorine to disinfect and provide protection from bacteria, but this means we do have some higher risk of bacterial contamination from a broken pipe or other loss of pressure event. We sample the water at our well and system monitoring points on a regular basis, to look for harmful chemicals or bacteria and verify that the water system is operating properly. Our laboratory data shows that we have good quality water with very few compounds even detected, and all within limits. The Oregon Health Authority inspects water systems every 3-5 years. Our last survey was on September 6, 2022, and we are working through some procedural, documentation and facility deficiencies that were noted at that time.

What if I have questions about my water?

If you have questions about this report or anything else concerning our water system, please call our Water Superintendent Jim Parks at 458-459-0048 or Board President Josh Cloke at 319-572-1718. You can email us at contact@blueriverwaterdistrict.com and see the latest news at www.BlueRiverWaterDistrict.com and you are also invited to attend our monthly board meetings.

Blue River contracts with Rainbow Water District (PO Box 8, 1550 N. 42nd Street, Springfield 97477) to process our water bills and provide some technical support. If you have a billing or water account question, please call Rainbow Water District at 541-746-1676.

Here is what the Environmental Protection Agency (EPA) says about drinking water contaminants:

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Drinking water sources (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. *Blue River's water system* is supplied entirely by groundwater wells during normal operations. To ensure safe drinking water, the EPA regulates the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water to provide the same protection for public health.

Contaminants that may be present in source water may include:

Microbial contaminants, such as viruses and bacteria, may come from wildlife or septic systems. *Radioactive contaminants* can occur naturally. *Inorganic contaminants*, such as salts and metals, can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, are byproducts of industrial processes, and can come from septic systems, gas stations, and urban stormwater runoff. *Pesticides and herbicides* may come from a variety of sources such as farming, urban stormwater runoff and home or business use. Some people may be more vulnerable than others to contaminants in drinking water. Immuno-compromised persons such as organ transplant patients, persons undergoing chemotherapy for cancer, people with HIV/AIDS or other immune system disorders, infants and some elderly, can be particularly at risk from infections. These people should seek advice about drinking water from their personal health care providers. Call 1-800-426-4791 (the Safe Drinking Water Hotline) for EPA & Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants, and for more information about water contaminants and their potential health effects.

A note about lead in the water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is mainly from materials and components associated with service lines and home plumbing. Blue River Water District is responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at www.epa.gov/safewater/lead.

BLUE RIVER HOMEOWNERS CONSUMER CONFIDENCE REPORT DATA

TESTING AT WELLFIELD ENTRY POINT "A" TO THE DISTRIBUTION SYSTEM (2022 or most recent results)

Chemical	Category	Source AB Well #2	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Nitrate (as Nitrogen)	Regulated Inorganic	0.416 ppm (12/19/2022)	Yes	10 ppm	10 ppm	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits
Arsenic	Regulated Inorganic	Not Detected (12/22/2022)	Yes	10 ppb	0 ppb	Erosion of natural deposits
Inorganic Compounds	Regulated Inorganic	ND except Sodium (1/23/13)	Yes	varies	varies	Erosion of natural deposits
Synthetic Organics	Regulated SOCs	Not Detected (12/19/2022)	Yes	varies	varies	Byproducts of industrial processes
Volatile Organics	Regulated VOCs	Not Detected (12/19/2022)	Yes	varies	varies	Byproducts of industrial processes
Combined Radium Combined Uranium Gross Alpha	Regulated Radionuclides	ND (7/3/14) ND (7/3/14) ND (7/3/14)	Yes	5 pCi/L 30 ppb 15 pCi/L	0 pCi/L 0 ppb 0 pCi/L	Erosion of natural deposits
Sodium**	UNREGULATED Inorganic	6.2 ppm (1/23/2013)	Yes	No MCL. 20 ppm is advisory only	n/a	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits

TESTING AT ROUTINE DISTRIBUTION SYSTEM LOCATIONS (2022 or most recent results)

Chemical	Contaminant Category	Distribution System Sample Results	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Total Coliform Bacteria	Regulated Microbiological	0.18% positive (2) *** (11 routine samples collected in 2022)	Yes	no more than 1 positive sample per month	0	Naturally present in the environment
Fecal Coliform and E.Coli Bacteria	Regulated Microbiological	0.0% positive (11 routine samples collected in 2022)	Yes	no positive samples	0	Human and animal fecal waste
Chlorine	Disinfectant	System is not chlorinated	Yes	4 ppm	4 ppm	Water additive used to control microbes
Asbestos	Regulated Inorganics	Not Detected (1/23/2013)	Yes	7 MFL (million fibers per Liter)	7 MFL (million fibers per Liter)	Decay of asbestos cement in water mains; erosion of natural deposits
Copper	Regulated Inorganics	ND-1.54 (2020) 90th percentile summary is 0.77 ppm	Yes 90% < AL	Action Level = 1.3 ppm	0	Corrosion of household plumbing systems
Lead	Regulated Inorganics	ND-18.9 ppb (2020) 90th percentile summary is 10.7 ppb	Yes 90% < AL	Action Level = 15 ppb	0	Corrosion of household plumbing systems, erosion of natural deposits

Definitions: Not Detected (ND) indicates the contaminant was not detected at levels above the laboratory's reporting capability.

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health.

MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

One **Part Per Million (ppm)** corresponds to one penny in \$10,000 or about one minute in 2 years. Measurements in ppm indicate only one milligram of contaminant per liter of water. One **Part Per Billion (ppb)** corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years. It takes 1,000 parts per billion to equal one part per million. **Picocuries Per Liter (pCi/L)** is a measurement of radioactivity, a trillion times smaller than one Curie.

Running Annual Average (RAA) is computed using monthly or quarterly results and is a value used to determine compliance.

Notes - Some contaminants are monitored less than once per year. Data shown are the most recent monitoring done in compliance with regulations.

* Federal Limits may be either the MCL or the MRDL. Federal Goals may be either the MCLG or MRDLG. Maximum contaminant levels (MCLs) are the highest levels of chemicals that the EPA has determined to be acceptable for life-long consumption. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated chemicals, a person would have to drink 2 liters (about 8 glasses) of water every day at the MCL for a lifetime to have a one-in-a-million chance of having the undesirable health effects.

** Sodium is not a regulated contaminant, but we show the results of sodium testing for all water sources since some source water contains an amount of sodium which people with high blood pressure may wish to know about.

*** The September routine sample was not collected in error. One positive routine sample was collected August 2. Six repeat samples on August 4 and August 8 were positive for total coliform but negative for E.coli. A triggered source sample from Well 2 was collected and tested absent for coliform on August 4. A Level 1 investigation was performed to determine and correct the cause of the contamination. One positive routine sample was collected December 19. A triggered source sample from Well 2 was collected on December 21 and tested positive for total coliform but negative for E. coli. Three repeat samples on December 21 were all negative for total coliform.